

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

- 1 1. (Currently amended): Apparatus for reproducing information from a
2 storage medium comprising:
3 a motor unit operable to rotate said storage medium at any one of a plurality of
4 rotational speeds; and
5 a data control unit operatively coupled to said motor unit and operable with said
6 storage medium for accessing information contained on said storage medium;
7 said data control unit configured to receive size-indicating information relating to
8 an amount of data to be reproduced,
9 said data control unit configured to receive a request for a read operation and, in
10 response to said request, to control said motor unit to rotate said storage medium at one of said
11 rotational speeds depending on said size-indicating information;
12 said data control unit being further configured for data transfer operations wherein
13 each data transfer operation includes an amount of data equal to a maximum data size, and in
14 response to a read request for an amount of data greater than said maximum data size;
15 said data control unit being operable to transfer said amount of data in two or
16 more data transfer operations, each data transfer operation of a data size less than or equal to said
17 maximum data size.
- 1 2. (Original): The apparatus of claim 1 wherein said data control unit is
2 further configured to control said motor unit to operate at a first rotational speed if said size-
3 indicating information indicates a data size that is less than a predetermined value and to operate
4 at a second rotational speed if said size-indicating information indicates a data size that is greater
5 than or equal to said predetermined value, said first rotational speed being less than said second
6 rotational speed.

1 3. (Original): The apparatus of claim 2 wherein said second rotational speed
2 is a maximum rotational speed.

1 4. (Original): The apparatus of claim 1 wherein said data control unit is
2 further configured to control said motor unit to operate at a first rotational speed if said size-
3 indicating information indicates a data size that is less than or equal to a first predetermined
4 value and to operate at a second rotational speed if said size-indicating information indicates a
5 data size that is greater than said first predetermined value and less than or equal to a second
6 predetermined value, said first rotational speed being less than said second rotational speed, said
7 second rotational speed being less than a maximum rotational speed.

1 5. (Original): The apparatus of claim 1 wherein said data control unit is
2 further configured to detect a number of successive read operations wherein each read operation
3 occurs within a predetermined period of time of a preceding read operation, and to operate said
4 motor unit at a rotational speed based on the number of said successive read operations detected.

1 6. (Original): The apparatus of claim 5 wherein said data control unit is
2 further configured to operate said motor unit at a maximum rotational speed if a predetermined
3 number of successive read operations is detected.

7. (Canceled)

1 8. (Original): The apparatus of claim 1 wherein said data control unit is
2 further configured to:
3 access said storage medium to receive said size-indicating information;
4 to transmit said size-indicating information to a principal unit; and
5 to receive said size-indicating information from said principal unit in connection
6 with said request for a read operation.

1 9. (Currently amended): The apparatus of claim 8 wherein said data control
2 unit is further configured for data transfer operations wherein each data transfer operation
3 includes an amount of data equal to a maximum data size, wherein said data control unit is
4 further configured to receive from said principal ~~device~~unit a plurality of two or more requests
5 for a read operation when information to be reproduced from said storage medium is greater than
6 said maximum data size, each of said requests being for an amount of a data less than or equal to
7 said maximum data size.

10. (Canceled)

1 11. (Currently amended): Apparatus for reproducing information from a
2 storage medium comprising:
3 a motor unit operable to rotate a storage medium at any one of a plurality of
4 rotational speeds; and
5 a data control unit operatively coupled to said motor unit and operable with said
6 storage medium for reproducing information from said storage medium,
7 said data control unit configured to detect a number of successive read operations
8 wherein each read operation occurs within a predetermined period of time of a preceding read
9 operation, and to rotate said storage medium at a rotational speed based on the number of said
10 successive read operations,
11 said data control unit being configured for data transfer operations wherein each
12 data transfer operation includes an amount of data equal to a maximum data size, and in response
13 to a read operation for an amount of data greater than said maximum data size,
14 said data control unit being operable to transfer said amount of data in two or
15 more data transfer operations, each data transfer operation of a data size less than or equal to said
16 maximum data size.

1 12. (Original): The apparatus of claim 11 wherein said data control unit is
2 further configured to control said motor unit at a maximum rotational speed if a predetermined
3 number of successive read operations is detected.

1 13. (Original): The apparatus of claim 11 wherein said data control unit is
2 further configured to access size-indicating information stored on said storage medium relating
3 to an amount of data to be reproduced and to transmit said size-indicating information to a
4 principal unit, said data control unit being further configured to receive said size-indicating
5 information from said principal unit in connection with a request for a read operation and to
6 rotate said storage medium at a rotational speed based on said size-indicating information.

1 14. (Original): The apparatus of claim 13 wherein said data control unit is
2 further configured to control said motor unit to operate at a first rotational speed if said size-
3 indicating information indicates a data size that is less than a predetermined value and to operate
4 at a second rotational speed greater than said first rotational speed if said size-indicating
5 information indicates a data size that is greater than or equal to said predetermined value.

1 15. (Original): The apparatus of claim 13 wherein said data control unit is
2 further configured to control said motor unit to operate at a first rotational speed if said size-
3 indicating information indicates a data size that is less than or equal to a first predetermined
4 value and to operate at a second rotational speed if said size-indicating information indicates a
5 data size that is greater than said first predetermined value and less than or equal to a second
6 predetermined value, said first rotational speed being less than said second rotational speed, said
7 second rotational speed being less than a maximum rotational speed.

16 - 19. (Canceled)

1 20. (Currently amended): A method for reproducing information from a
2 rotatable storage medium comprising:
3 receiving a read operation request;
4 receiving size-indicating information relating to an amount of data to be
5 reproduced from said rotatable storage medium;
6 rotating said rotatable storage medium at one of a number of predetermined
7 rotation speeds based on said size-indicating information; ~~and~~
8 reproducing said data from said rotatable storage medium; and
9 in response to receiving a read operation request for an amount of data greater
10 than said maximum data size, transferring reproduced data in two or more data transfer
11 operations, each data transfer operation of a data size less than or equal to said maximum data
12 size.

1 21. (Original): The method of claim 20 further including rotating said
2 rotatable storage medium at a first rotational speed if said size-indicating information indicates a
3 data size that is less than a predetermined value and rotating said rotatable storage medium at a
4 second rotational speed if said size-indicating information indicates a data size that is greater
5 than or equal to said predetermined value, said first rotational speed being less than said second
6 rotational speed.

1 22. (Original): The method of claim 20 further including rotating said
2 rotatable storage medium at a first rotational speed if said size-indicating information indicates a
3 data size that is less than or equal to a first predetermined value and further including rotating
4 said rotatable storage medium at a second rotational speed if said size-indicating information
5 indicates a data size that is greater than said first predetermined value and less than or equal to a
6 second predetermined value, said first rotational speed being less than said second rotational
7 speed, said second rotational speed being less than a maximum rotational speed.

1 23. (Original): The method of claim 20 further including detecting a number
2 of successive read operations, wherein each read operation occurs within a predetermined period
3 of time of a preceding one of said read operations, and rotating said rotatable storage medium at
4 a rotational speed based on the number of said successive read operations detected.

1 24. (Original): The method of claim 23 further including rotating said
2 rotatable storage medium at a maximum rotational speed if a predetermined number of
3 successive read operations is detected.

 25. (Canceled)

1 26. (Original): The method of claim 20 further including obtaining said size-
2 indicating information from said rotatable storage medium and transferring it to a principal unit,
3 receiving said read operation request from said principal unit, said read operation request
4 including said size-indicating information.

1 27. (Currently amended): The method of claim 26 further including
2 transferring reproduced data to a ~~principle~~-principal unit wherein a data transfer operation is
3 performed with a maximum data size, the method further including receiving a plurality of two
4 or more read operation requests in order to transfer an amount of reproduced data exceeding said
5 maximum data size, each of said read operations being of a data size less than or equal to said
6 maximum data size.

 28. (Canceled)

1 29. (New): Apparatus for exchanging information with a storage medium
2 comprising:
3 a motor unit operable to rotate said storage medium at any one of a plurality of
4 rotational speeds; and
5 a data control unit operatively coupled to said motor unit and operable with said
6 storage medium for reading information from and writing information to said storage medium,
7 said data control unit configured to receive size-indicating information relating to
8 an amount of data associated with an I/O (input, output) request,
9 said data control unit configured to receive an I/O request and, in response
10 thereto, to control said motor unit to rotate said storage medium at one of said rotational speeds
11 depending on size-indicating information associated with said I/O request,
12 wherein said data control unit is further configured to control said motor unit to
13 operate at a first rotational speed if said size-indicating information indicates a data size that is
14 less than or equal to a first predetermined value and to operate at a second rotational speed if said
15 size-indicating information indicates a data size that is greater than said first predetermined value
16 and less than or equal to a second predetermined value, said first rotational speed being less than
17 said second rotational speed, said second rotational speed being less than a maximum rotational
18 speed.

1 30. (New): Apparatus for exchanging information with a storage medium
2 comprising:
3 a motor unit operable to rotate said storage medium at any one of a plurality of
4 rotational speeds; and
5 a data control unit operatively coupled to said motor unit and operable with said
6 storage medium for reading information from and writing information to said storage medium,
7 said data control unit configured to receive size-indicating information relating to
8 an amount of data associated with an I/O (input, output) request,

9 said data control unit configured to receive an I/O request and, in response
10 thereto, to control said motor unit to rotate said storage medium at one of said rotational speeds
11 depending on size-indicating information associated with said I/O request,
12 said data control unit being further configured for data transfer operations wherein
13 each data transfer operation includes an amount of data equal to a maximum data size, and in
14 response to a read request for an amount of data greater than said maximum data size,
15 said data control unit being operable to transfer said amount of data in two or
16 more data transfer operations, each data transfer operation of a data size less than or equal to said
17 maximum data size.

1 31. (New): Apparatus for a storage medium comprising:
2 a motor unit operable to rotate a storage medium at any one of a plurality of
3 rotational speeds; and
4 a data control unit operatively coupled to said motor unit and operable with said
5 storage medium for exchanging information with said storage medium,
6 said data control unit configured to detect a number of successive I/O (input,
7 output) operations of a first kind wherein each I/O operation occurs within a predetermined
8 period of time of a preceding one of said I/O operations, and in response to such detection to
9 rotate said storage medium at a rotational speed based on the number of said successive I/O
10 operations,
11 said data control unit being further configured to access size-indicating
12 information associated with an amount of data to be exchanged and to transmit said size-
13 indicating information to a principal unit,
14 said data control unit being further configured to control said motor unit to
15 operate at a first rotational speed if said size-indicating information indicates a data size that is
16 less than or equal to a first predetermined value and to operate at a second rotational speed if said
17 size-indicating information indicates a data size that is greater than said first predetermined value
18 and less than or equal to a second predetermined value, said first rotational speed being less than

19 said second rotational speed, said second rotational speed being less than a maximum rotational
20 speed.

1 32. (New): Apparatus for a storage medium comprising:
2 a motor unit operable to rotate a storage medium at any one of a plurality of
3 rotational speeds; and
4 a data control unit operatively coupled to said motor unit and operable with said
5 storage medium for exchanging information with said storage medium,
6 said data control unit configured to detect a number of successive I/O (input,
7 output) operations of a first kind wherein each I/O operation occurs within a predetermined
8 period of time of a preceding one of said I/O operations, and in response to such detection to
9 rotate said storage medium at a rotational speed based on the number of said successive I/O
10 operations,
11 said data control unit being configured for data transfer operations wherein each
12 data transfer operation includes an amount of data equal to a maximum data size, and in response
13 to an I/O operation for an amount of data greater than said maximum data size, said data control
14 unit being operable to transfer said amount of data in two or more data transfer operations, each
15 data transfer operation of a data size less than or equal to said maximum data size.

1 33. (New): A method for performing I/O (input/output) operations with a
2 rotatable storage medium comprising:
3 receiving an I/O request;
4 receiving size-indicating information relating to an amount of data to be
5 transferred with said rotatable storage medium by said I/O request;
6 rotating said rotatable storage medium at one of a number of predetermined
7 rotation speeds based on said size-indicating information; and
8 performing said I/O request to effect a transfer of said data with said rotatable
9 storage medium,
10 wherein said rotating includes rotating said rotatable storage medium at a first
11 rotational speed if said size-indicating information indicates a data size that is less than or equal

12 to a first predetermined value and further including rotating said rotatable storage medium at a
13 second rotational speed if said size-indicating information indicates a data size that is greater
14 than said first predetermined value and less than or equal to a second predetermined value, said
15 first rotational speed being less than said second rotational speed, said second rotational speed
16 being less than a maximum rotational speed.

1 34. (New): A method for performing I/O (input/output) operations with a
2 rotatable storage medium comprising:
3 receiving an I/O request;
4 receiving size-indicating information relating to an amount of data to be
5 transferred with said rotatable storage medium by said I/O request;
6 rotating said rotatable storage medium at one of a number of predetermined
7 rotation speeds based on said size-indicating information; and
8 performing said I/O request to effect a transfer of said data with said rotatable
9 storage medium,
10 wherein if said size-indicating information is greater than said maximum data
11 size, then performing said I/O request in two or more data transfer operations, each data transfer
12 operation of a data size less than or equal to said maximum data size.